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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/463,557	08/15/2000	Nir Bar Natan	35265/1:1	6477

3528 7590 05/09/2003

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EXAMINER

KIBLER, VIRGINIA M

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 05/09/2003

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/463,557

Applicant(s)

NATAN ET AL.

Examiner

Virginia M Kibler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-11 and 13-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 9-11, 13-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 August 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6, 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### *Specification*

1. The disclosure is objected to because of the following informalities: "that" should be changed to "than" on line 34, page 7.

Appropriate correction is required.

### *Drawings*

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: reference number 19, Figure 1. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-6, 9-11, 17, and 20-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Beatson et al. (5,892,824).

Regarding claim 1, Beatson et al. ("Beatson") discloses a digitizer 300 and an associated pen 74 (Figure 7), a dynamic identification unit 200 for receiving data from the digitizer produced during signing a signature with the pen on the digitizer (Figure 5), calculating signature parameters and permitted variations from the data (Col. 19, lines 23-26), and generating a reference signature record therefrom (Col. 18, lines 7-58). Beatson further discloses a comparator for comparing the received parameters produced during signature with the reference signature record (Col. 19, lines 26-33), and an apparatus for providing an accept/reject response in accordance with the output of the comparator (Col. 19, lines 33-38). Beatson discloses the reference signature record as a dynamic personal signature profile that is updated in accordance with received parameters produced during each accepted signature (Col. 19, lines 39-48).

Regarding claim 2, Beatson discloses a transmitter for transmitting the calculated signature parameters for authentication and a receiver for receiving the transmitted signature parameters with the receiver being coupled to the comparator (Col. 9, lines 29-45).

Regarding claim 3, Beatson discloses including an encryptor for encrypting the measured parameters to provide an encrypted signature record (Col. 14, lines 65-67) and the dynamic identification unit including a decoder for decoding the encrypted signature record (Col. 15, lines 21-31).

Regarding claim 4, Beatson discloses the reference signature stored on an IC card (Col. 18, lines 7-18).

Regarding claim 5, Beatson discloses authenticating a signature transmitted over a transmission line as shown in Figure 1 (Col. 9, lines 29-33). Beatson discloses a vendor unit 64 including a digitizer (Col. 12, lines 35-54) and an associated pen 74 (Figure 2). Beatson further

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discloses a signature authorization unit 68 coupled to the vendor unit by the transmission line (Figure 1). Beatson discloses a dynamic identification unit 200 for receiving data from the digitizer produced during signing a signature with the pen on the digitizer (Figure 5), calculating signature parameters and permitted variations from the data (Col. 19, lines 23-26), and generating a reference signature record therefrom (Col. 18, lines 7-58). Beatson further discloses a comparator for comparing the received parameters produced during signature with the reference signature record (Col. 19, lines 26-33), and an apparatus for providing an accept/reject response to the vendor unit in accordance with the output of the comparator (Col. 19, lines 33-38).

Regarding claim 6, Beatson discloses a cardholder unit 64 including a digitizer (Col. 12, lines 35-54) and an associated pen 74 and an apparatus for transmitting the output of the digitizer over the communication transmission lines (Figure 1). Beatson further discloses a signature authorization unit 68 for receiving data from the digitizer produced during signature by the pen on the digitizer, calculating signature parameters therefrom (Col. 19, lines 23-26), and generating a reference signature record corresponding thereto (Col. 18, lines 7-58). Beatson discloses a comparator for comparing the parameters produced during signature with the reference signature record (Col. 19, lines 26-33) and an apparatus for providing an accept/reject response according to the output of the comparator (Col. 19, lines 33-38). Beatson further discloses a vendor unit 52 coupled to the cardholder unit and to the signature authorization unit by the communication transmission lines and including a transceiver for receiving the output of the digitizer from the cardholder unit and transmitting it to the signature authorization unit, and for receiving the accept/reject response from the signature authorization unit (Col. 9, lines 29-45).

Regarding claim 9, Beatson discloses a method of authenticating a signature including providing a reference signature record (Col. 9, lines 1-10), signing with a pen 74 on a digitizer tablet 64, calculating signature parameters from data received from the digitizer produced from signing the signature with the pen on the digitizer (Col. 19, lines 23-26), comparing the parameters produced from signing the signature with the reference signature record (Col. 19, lines 26-33), and providing an accept/reject response in accordance with results of the comparison (Col. 19, lines 33-38). Beatson further discloses the reference signature record as a dynamic personal signature profile that is updated in accordance with received parameters produced during each accepted signature (Col. 19, lines 39-48).

Regarding claim 10, Beatson discloses encrypting the calculated parameters with an encryption key after the step of calculating (Col. 14, lines 65-67) and decrypting the encrypted parameters before comparing the parameters (Col. 15, lines 21-27).

Regarding claim 11, Beatson discloses providing a reference signature reference including writing the signature on the digitizer several times and calculating signature parameters for each signature (Col. 18, lines 16-33), calculating permitted variation of the signature parameters (Col. 18, lines 51-52), and storing the signature parameters and permitted variation as a reference signature record (Col. 18, lines 53-58).

Regarding claim 17, Beatson discloses providing an accept/reject response including granting or denying access to network resources (Col. 8, lines 16-39).

Regarding claim 20, Beatson discloses comparing signature parameters on parameters received from the digitizer tablet at any orientation and size of signature relative to the tablet (Col. 16, lines 5-30).

Regarding claim 21, Beatson discloses calculating signature parameters on parameters received from the digitizer tablet at any orientation and size of signature relative to the tablet (Col. 16, lines 5-30).

Regarding claim 22, Beatson discloses providing an accept/reject response including granting or denying access to network resources (Col. 8, lines 16-39).

### *Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al. (5,892,824) as applied to claim 1 above.

Regarding claim 16, Beatson discloses providing a reject response when a signature is incompatible with the immediately previous signature (Col. 18, lines 34-39). Beatson does not appear to specify when a signature is identical to an immediately previous signature. However, this would have been obvious in light of Beatson's disclosure to specify rejecting a signature that is identical to an immediately previous signature in order to obtain a plurality of variations to formulate a reference signature record.

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7. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al. (5,892,824) as applied to claim 9 above.

Regarding claim 19, the arguments analogous to those presented above for claim 16 are applicable to claim 19.

8. Claims 7, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al. (5,892,824) as applied to claim 1 above, and further in view of Fan et al. (5,111,512).

Regarding claim 7, Beatson discloses the reference signature recode including signature parameters and permitted variations. Beatson does not seem expressly state storing the parameters and variations as an array. However, Fan et al. ("Fan") teaches that it is known to store signature parameters an array (Col. 2, lines 11-15). Therefore, it would have been obvious to one of ordinary skill in the art to have modified the signature parameters and permitted variations disclosed by Beatson to include an array, as taught by Fan, in order to store the discrete values.

Regarding claim 13, Beatson discloses the personal signature profile including parameters and personal tolerances based on received parameters produced during a plurality of accepted signatures (Col. 19, lines 39-48 and Col. 20, lines 1-14). The arguments analogous to those presented above for claim 7 are applicable to claim 13.

Regarding claim 14, Beatson discloses the personal tolerances are determined individually for each person according to the variations in the received parameters produced during each accepted signature of that person (Col. 19, lines 39-48 and Col. 20, lines 1-14).



9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al. (5,892,824) as applied to claim 1 above, and further in view of Lee (5,422,959).

Regarding claim 15, Beatson does not appear to recognize one of the parameters being pen tilt angle. However, Lee teaches that it is known to use pen tilt angle as a parameter (Abstract, lines 6-9). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the signature parameters disclosed by Beatson to include pen tilt angle, as taught by Lee, as an alternative individual parameter to verify a signature.

10. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beatson et al. (5,892,824) as applied to claim 9 above, and further in view of Lee (5,422,959).

Regarding claim 18, the arguments analogous to those presented above for claim 15 are applicable to claim 18.

#### ***Contact Information***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia M Kibler whose telephone number is (703) 306-4072. The examiner can normally be reached on Mon. - Thurs. 8:00 - 5:30 and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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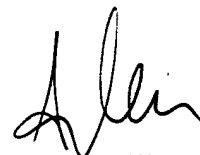
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-0377.

VK

April 30, 2003



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